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With the country's high vulnerability to the impacts of climate change, the Commission pursued its mandate to enable the government to address this problem. With a clear direction from the Commission headed by His Excellency, President Benigno Aquino as Chairman, the year 2012 saw the Commission making a more aggressive stand, particularly in international climate negotiations while at the same time steering and coordinating local initiatives to ensure climate change is mainstreamed in all policies, programs and budget of the government.

# Climate Change-Related Research and Development Activities

With the National Strategic Framework and the National Climate Change Action Plan (NCCAP) providing the basis for climate change planning, research and development, among others, the Commission formulated a research agenda that looked at challenges and opportunities as it pursues ways and means to effectively deal with the causes and effects of climate change.

### Philippine Research and Development Agenda on Climate Change

The Philippines' NCCAP highlights the need to prepare a Research and Development Agenda on Climate Change which will include identification of priority researches that are critical in assessing and addressing climate change risks and impacts.

The Climate Change Commission led scoping activities of existing researches related to climate change done by government agencies, academe and private sector. The output was consolidated into a compendium of climate change information and researches. By gathering studies on the Philippine experiences with climate change from both local and international sources, it helps promote a structured and international exchange of experience and knowledge among adaptation and mitigation practitioners.

The main challenge for the Commission lies in consolidating various R&D Agenda and analyzing gaps thereafter to develop a comprehensive and cohesive National Climate Change Research and Development Agenda that meets the country's requirement for collective actions to environmental, social, political and economic impacts of climate change. The National Climate Change Research and Development Agenda will serve as the guiding document for the country's research, science and academic institutions assisting the public, private and non-government sectors in the quest for formulating solutions to issues and concerns brought about by climate change.

The Commission, in coordination with Department of Science and Technology and the Department of Environment and Natural Resources Environment Research and Development convened and consulted members of the academe, civil society representatives, international and national development partners, government agencies local government units in a national workshop.

# CLIMATE CHANGE Conferences/Workshops Photographed by: Noriaki Castillo www.noriakiisobe.com



## Technical Discussions and Scientific Meetings on Climate Change

Fully aware of the important role that government, private institutions, civil society and the academe play in the pursuit of its goals, the Commission hosted a series of technical meetings on research and development and climate change agenda.

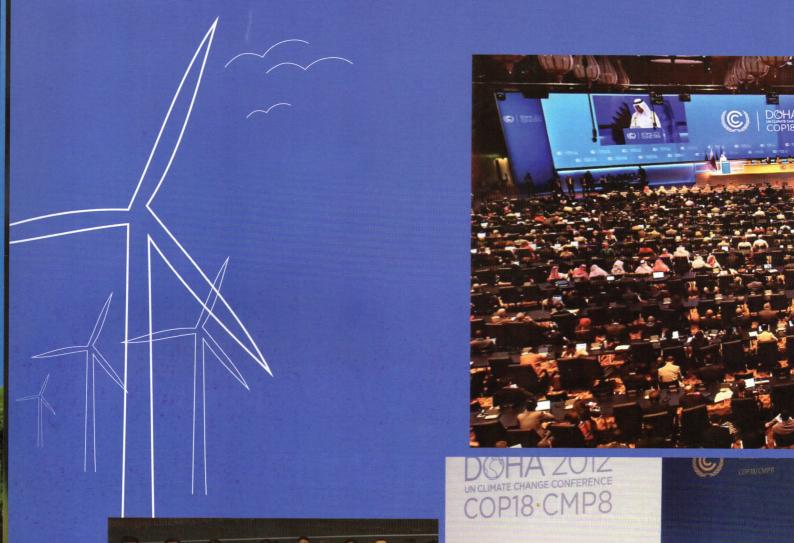
Underscoring the importance of enhanced vulnerability and adaptation assessments towards achieving the objective of building the adaptive capacity of communities and increasing the resilience of natural ecosystems to climate change, the Commission provided a venue to discuss all relevant vulnerability and risk assessment tools. A technical discussion on disaster and climate risk assessment – looking into vulnerability and impact assessment frameworks, tools and indices – was conducted. The technical discussion aimed to develop a coherent and practice metrics or indicators for VIA assessment that can be consistently applied at the national and sub-national levels.

In the regional level, the Commission partnered with the University of the Philippines Los Banos, SEARCA and Asia

Pacific Adaptation Network (APAN) for an International Conference on Climate Change Impacts and Adaptation for Food and Environmental Security. The conference brought together researchers, academicians, policy makers and planners, and other professionals in the Southeast Asia region in a discussion forum to exchange and update information, integrate and forge linkages towards enhanced regional capacity to achieve food, environmental, nutritional and health security in the face of climate change.

The conference covered the effects and impacts of climate change on food and environmental security issues, including state of the art knowledge and assessment tools such as (1) vulnerability assessment, (2) impact assessment, (3) risk characterization, and (4) risk analysis; institutional (policy, governance, culture) and economics aspects of climate change science and adaptation; country and regional collaboration experiences for climate change adaptation and disaster risk reduction; and other climate change-related topics.

# COP 18 · CMP8 DOHA QATAR 2012



EVENT WEBSITE: WWW.COP18.QA















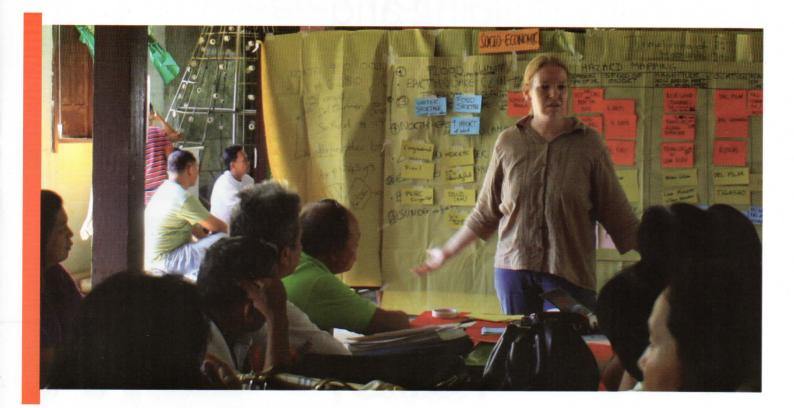
# Established Monitoring and Evaluation Strategies

The Commission, together with the Department of Budget and Management supported by World Bank conducted a Climate Public Expenditure and Institutional Review (CPEIR) in the Philippine government. The CPEIR assessed specific expenditures against development objectives expressed in national policies and strategies. With limited resources, the government wants to monitor and evaluate climate change-related projects being proposed and implemented every year. This is to assess the total impact of the project to the country's goal of building its adaptive capacity and increasing resiliency against climate change.

To support this initiative, the Commission and DBM developed a Climate Change Screening Guidelines, a guide-criteria for tagging projects, activities and program related to climate variability and change. In line with this, the Commission held a pilot-testing workshop of the developed screening guidelines. This was attended by representatives from member agencies of the Cabinet Cluster on Climate Change Adaptation and Mitigation. The workshop aims to test the guidelines' appropriateness, effectiveness and easiness, and to gather the government's reaction and evaluation on the use of the tool in tagging CC-related programs and projects.







### II. Participation and Attendance to Different Local and International Workshops, Conferences, Meetings

The Philippines, being a party to the United Nations Framework Convention on Climate Change, and as one of the countries highly vulnerable to the impacts of climate change, has maintained an aggressive posture in climate negotiations and contributed valuable inputs in conferences and meetings both in the international and local levels.

Primary of these meetings were the 18th session of the Conference of the Parties (COP 18) to the UNFCCC and the 8th session of the Conference of Parties serving as the Meeting of the Parties to the Kyoto Protocol held in Doha, Qatar from November 26 to December 8, 2012. The Commission also took part in preparatory meetings for COP 18.

The Climate Change Commission and Ateneo School of Government successfully presented the range of

practices in the country in enabling communities to address climate change at a side event in the Doha UN Climate Change Conference 2012 held at the Qatar National Convention Center last November 28. About a hundred representatives from various countries and non-government organizations participating in the conference attended the event entitled "Best Practices on Enabling Communities to Mitigate and Adapt to Climate Change."

The Commission was also part of the Philippine delegation of the United Nations Conference for Sustainable Development (UNCSD) or the Rio + 20 in June 2012.

Locally, the Commission attended various climate change-related meetings, workshops and conferences. It also conducted similar activities during the year.

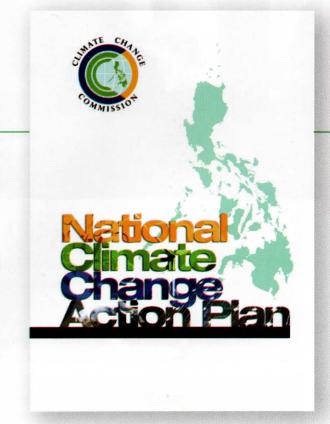
### III. Capability Building and Technical Assistance on Climate Change-Related Programs

# Capability Building and Technical Assistance on Climate Change-Related Programs

### National Climate Change Action Plan

As part of the implementation of the NCCAP, the Commission developed a results-based monitoring and evaluation system (RBMES) that is designed to track the progress of NCCAP. The RBMES provides the logic for putting in place appropriate interventions and tracking the progress of implementation and measuring outcomes. It complements the results-based monitoring approach being employed by the Department of Budget and Management under the Operational Performance Indicator Framework (OPIF) that is being mainstreamed by the government.

To systematically integrate the concept of climate change in the policy formulation and development plans of all units of government and enable the country to cope with the impacts of climate change, the Commission, thru the Philippine Climate Change Adaptation Project (PhilCCAP), conducted a series of workshops with National Government Agencies (NGAs) to establish and strengthen policy (planning and monitoring) coordination among planning officers, budget officers and climate change focal persons to ensure attainment of the goals set in the framework and action plan.



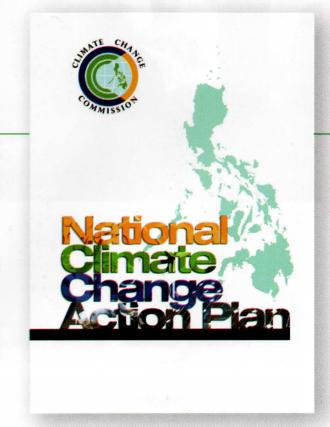
These workshops led to the identification of the agency's plans and programs vis-a-vis the plans outlined in the National Climate Change Action Plan (NCCAP). As a result, the Commission, together with the agencies, has laid down the ground towards identification of anchor programs which perceived to be the priority climate change agenda for the next three years.

# Capability Building and Technical Assistance on Climate Change-Related Programs

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# 7Strategic Priorities



Sustainable Energy



Water Sufficiency



**Ecological Sustainability** 



Climate Smart Industries & Services



**Human Security** 



Knowledge & Capacity Development



Food Security

### Formulation of Vulnerability and Adaptation Guidelines

The development of a science-based approach to climate change adaptation requires the establishment of a comprehensive knowledge system. Vulnerability assessment is the process of identifying, quantifying and prioritizing the vulnerabilities in a system- assessing the threats from potential hazards to the population and existing infrastructure. The vulnerability and adaptation assessments need to be generated to serve as the country's scientific basis towards quantifying and prioritizing climate-related vulnerabilities and refining adaptation strategies in both the national and local settings.

In line with this, the Commission studied various VA tools and methodologies that will provide guidance in the adoption of the general VA framework which can be used by relevant stakeholders.





# Local Climate Action Planning

Appropriate land use and land development is one of the most concrete ways to implement Climate Change Adaptation Planning and Disaster Risk Reduction Management, and to harmonize these with sustainable development goals. At the local level, Section 14 of RA 9729 states that "LGUs shall be the frontline agencies for the formulation, planning and implementation of climate change action plans in their respective areas, consistent with the provisions of the Local Government Code, the Framework and the National Climate Change Action Plan." Thus, LGUs need an easy-to-use tool to facilitate the application of climate lens in their CLUPs that will complement the existing guidelines to CLUP preparation.

In coordination with the Housing and Land Use Regulatory Board, a Resource Book was developed that will summarize the important considerations for climate change action planning (CCAP) and disaster risk reduction and management (DRRM) in each of the 12 steps of the Comprehensive Land Use Plan (CLUP) preparation. The Resource Book includes theoretical background behind CCAP and DRRM, guide questions, data needs and data sources, required analyses, samples from case studies or other available literature, checklists and directories of other appropriate resources. This initiative answers the immediate needs of the LGUs already in the process of revising their CLUPs, and it is also the precursor to a larger effort to fully revise the CLUP guidelines.





# Demonstration of Ecotown Framework

Impacts of climate change is predicted to worsen poverty incidence in the country which in turn will increase the vulnerability of about a third of the population still living below the poverty line and heavily dependent on natural resources for subsistence. In line with this, the Climate Change Commission led the demonstration of a framework determined to increase the resiliency of local communities to the impacts of climate change.

An ecotown, or ecologically stable and economically resilient town, is a planning unit composed of municipalities or a group of municipalities located within and around boundaries of critical key biodiversity areas, which are at high risk to climate change. It is a means of implementation of the National Climate Change Action Plan (NCCAP) at the local level. It aims to build the resiliency of communities and ecosystems to the impacts of climate change through increase in the adaptive capacity of communities by economic means as well as adaptive capacity of ecosystems through protection/ conservation/ sustainable management.

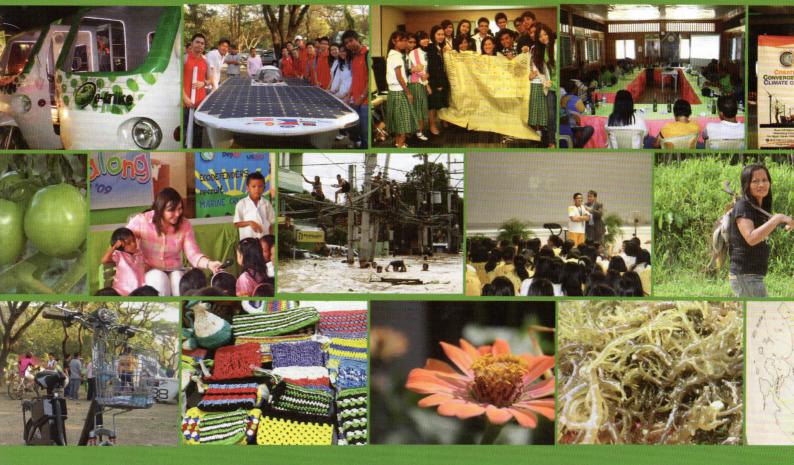
Initially, the Commission has identified ten municipalities to demonstrate the ecotown framework. These are the municipalities of Del Carmen, Pilar, San Benito, and San Isidro in Siargao Island; Borongan, Can-avid, Guian and Llorente in Eastern Samar; San Vicente in Palawan and Ivana in Batanes, which will all be implemented within two years. An additional five municipalities were included in the demonstration under the technical assistance of the Asian Development

Bank. The municipalities are located in the Upper Marikina River Basin Protected Landscape, which include Antipolo City, Baras, Rodriguez, San Mateo and Tanay.

The Ecotown Framework Demonstration is a sevenstep process to achieve climate change resiliency of the said community.

For 2012, the Commission finalized the conduct of Natural Resource Assessment (NRA) in the four municipalities of Siargao Island. The NRA is a key step in order for the local government units to be informed about the status of the natural resources and determine ecosystem services within their jurisdiction. The NRA in Siargao covered the forest, agriculture, coastal and marine resources. Renewable energy potential was also assessed which showed that Siargao Island can generate its own power through biomass, wind and hydro energy. NRA in San Vicente, Palawan also looked into the same resources with focus on how these resources can be tapped to spur green growth in the area.

The Commission also led the conduct of vulnerability assessment (VA) in the four municipalities of Siargao Island and San Vicente Palawan. An integrated assessment of the vulnerabilities to climate change in the different sectors in the LGUs, both current and future is fundamental to local climate change action planning. VA is conducted for health, coastal and marine and agriculture --key sectors in all five municipalities.



# ECOTOWN PROJECT





Several consultations with relevant stakeholders were conducted to gather and finalize the assessment.

The Commission also conducted workshops to capacitate the local government units in participatory resource mapping and greenhouse gas emissions inventory and prepared survey instruments for the same group. The Preliminary and, later, the Ecosystem Valuation Report of the municipalities in Siargao were also prepared and subsequently presented during dialogues. Resource and enhanced hazard maps were also generated for the municipalities in Siargao and the latter for San Vicente, Palawan.

Prior to the implementation of the activities on the ground, the CCC presented the framework to various governing bodies of the project sites to seek support such as the Protected Area Management Boards of Siargao Island Protected Landscapes and Seascape, Upper Marikina Riverbasin Protected Landscape, Palawan Council for Sustainable Development and Regional Development Council of Region 4B.

### Institutionalization of Greenhouse Gas Inventory in Key Government Institutions

The Commission is also mandated under Republic Act 9729 to formulate strategies on mitigating greenhouse gas emissions and other anthropogenic causes of climate change. Identifying the key sources of emissions across sectors is a crucial step towards determining potential mitigation options in addressing climate change impacts. Through its partnership with USAID, the Commission has led efforts in building the capacities of selected government agencies on basic greenhouse gas accounting.

In an effort to institutionalize the conduct of a national greenhouse gas inventory, an institutional framework was formulated to identify key government agencies to serve as lead agencies for specific sectors in the conduct of the national GHG inventory. These agencies are the following:

- · Department of Energy energy sector
- · Department of Agriculture agriculture sector
- Department of Transportation transport sector
- Department of Environment and Natural Resources waste, forestry and industrial processes sectors

The Commission has initiated several activities as part of its technical assistance and capacity building initiatives for the different agencies to prepare them for their role as lead agencies for the national GHG inventory. In partnership with USAID through the Enhancing Capacities for Low Emission Development Strategies (EC-LEDS) programme, a workshop on determining data needs and gaps for the energy sector was conducted for the Department of Energy. This enabled the DOE to identify what types of data are needed for the GHG inventory, which ones are already being collected by the Department and how to improve data collection.

To assist government agencies determine mitigation potential as well as documenting sources of emissions in the agriculture and forestry sectors, a technical capacity workshop was conducted on the use of the Agriculture and Land Use Software. This technical training was attended by representatives from NAMRIA, FMB, DABAS. Said training enabled the participants to identify data needed for the inventory and mitigation analysis. A work plan was developed towards improving the data collection.

The Commission also conducted several capacity building initiatives for other government agencies in partnership with the UNDP under the Low Emission Capacity Building (LECB) Programme. A training workshop was conducted for the Environmental Management Bureau of the Department of Environment and Natural Resources to prepare them for their role as the lead agency for the waste and industrial processes sector. The training workshop consisted of modules GHG emissions calculation for the national inventory on waste and industrial processes sectors. Hands-on training exercises were also given for each of the training modules on GHG emissions calculation. Discussion on possible institutional arrangements for the collection, conduct and archiving of national GHG inventory data were also facilitated. A rapid assessment of the data needed for the inventory was conducted and enabled the discussion on existing data and data gaps for the GHG inventory.

Similar technical workshop was conducted for the Bureau of Agricultural Statistics to prepare them for their role as the lead agency for the agriculture sector GHG inventory. A comprehensive training module was given to the participants by including climate science and climate policy aside from the technical modules on estimating emissions from sources in the agriculture sector. Rapid data assessment was also conducted to determine the level of data available for the sector.

# Database and IEC Activities





Republic Act 9729 gives the Commission the task to oversee the dissemination of information on climate change. In pursuance of this mandate, the Commission produced IEC materials designed to educate the people on the subject of climate change and enable them make a conscious effort to act and help fight this new menace to humanity.

The Commission produced the NCCAP and distributed copies to LGUs, members of Philippine Congress and Senate, concerned government agencies and other sectors. Handouts about the seven strategic priorities were also printed for distribution to the public.

It produced a video on the Palawan Ecotown which became part of the video collection of the Commission and shown during



conferences, workshops and meetings.

Press and photo release were also prepared and distributed to various media outlets as part of the continuing publicity efforts of the Commission designed to keep the public abreast on the various activities of the office.

The Greeneration was launched during the celebration of last year's Global Warming and Climate Change Consciousness Week which serves as the focal point of the Commission's advocacy efforts.

Installation of the Commission's internet infrastructure was started and upgrades of seven computer software and hardware were made.

# Partnerships

Low Emission Capacity Building (LECB)



LOW EMISSION CAPACITY BUILDING PROGRAMME The Commission received technical and financial support from international aid agencies to help it achieve specific program goals. Formalized in agreements, these include the following:

The LECB programme is a global initiative of the United Nations Development Programme aimed to support developing countries to craft their Nationally Appropriate Mitigation Actions, Low Emission Strategies, and Measuring, Reporting and Verification of low emission and climate-resilient development strategies. LECB will be implemented over a two-year period from 2012 to 2014 with funding support from the European Union, Germany and Australia. Among the expected results of the project is the establishment at the national level of a robust system for the preparation of GHG emission inventories and the formulation of the NAMAS and/or LEDS road maps within



Project ReBUILD Phase I (Resilience Capacity Building for Cities and Municipalities to Reduce Disaster Risks from Climate Change and Natural Hazards)

the context of national development. It is also expected to come up with a design of a MRV system to support the implementation and evaluation of NAMAS and/or LEDS sectoral roadmaps.

The government of New Zealand, through the New Zealand Aid Programme, is the project's funding agency while the United Nations Development Programme serves as its administering agency. The Commission handles implementation of the project, in coordination with key NGAs, which will end in 2015.

The project aims to increase capacities of key local actors in the cities and municipalities surrounding the Cagayan and Jalaur River Basins to manage disaster risks from and adapt to the overall impacts of climate change towards resilient and sustainable development. The project is intended to improve the governance framework by putting in place the necessary enabling policy environment, mechanisms, systems and tools, as well as, improving the competencies of the concerned personnel to address disaster risks from natural hazards and climate change which set back development gains and make the vulnerable poor population poorer.





### Project Twin Phoenix

An AusAID and UNDP-supported project, this three-year engagement is intended to contribute to the reconstruction of the Cagayan de Oro and Iligan cities into better cities which were badly affected by typhoon Sendong. Twin Phoenix is also involved in the reconstruction of the provinces of Compostela Valley and Davao Oriental.

Conceptualized as a programmatic intervention that is firmly rooted in a scientific and replicable approach, the project aims to assess the vulnerabilities of the cities of CDO and Iligan and the municipalities surrounding the CDO & Mandulog river basins to geological, meteorological and meteorologically-induced hazards due to climate change. The results of the assessment will provide the basis for priority mitigation actions like community-based and managed early warning systems and integrated contingency planning and mobilization.

Moreover, it envisions to impart long term impact especially in the local planning process by enabling the target local government unit beneficiaries to understand and undertake the necessary analysis and choose low cost response measures that can be integrated into existing physical/development plans, programmes & regulatory processes.

The project is anchored in one of the seven thematic areas of the NCCAP. As the complexity of the challenges posed by disasters and by the changing climate calls for an integrated approach, human security as one of the strategic priorities under the NCCAP, ensures the integration of climate change adaptation and disaster risk reduction in development planning and decision-making processes.







Support to the Climate Change Commission in the Implementation of the National Framework Strategy on Climate Change and the National Climate Change Action Plan

Commission in the enhancement, implementation and coordination of the national climate change strategy and the NCCAP and their mainstreaming into the regular planning processes down to the sub-national level. Measures include the development of financing framework for climate relevant activities, and of an innovative monitoring system for impact of climate related activities.

At the local level, support to climate-smart local planning and the implementation of pilot measures to enhance adaptation to climate change and mitigation of GHG emissions will be done. The implementation of the Renewable Energy Act will be supported through further development of the political frame conditions and technical capabilities for production and feed-in of renewable energies to the grid.

The project is funded by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) under its international Climate Initiative.

The United Nations Development Programme (UNDP)

### SecurePhl

TRAC-funded project, "Securing a Climate Resilient Philippines" or SecurePHL supports the implementation of NCCAP from 2012 to 2016. A year after the Plan's adoption, a multi-stakeholder assessment was conducted by the CCC to ensure the effectiveness of its implementation design. During the assessment, seven (7) national anchor programs were initially identified to coincide with the climate change adaptation and mitigation agenda outlined in the NCCAP from 2011 to 2028.

In addition, the SecurePHL Project covers the remaining activities of Environment and Natural Resources Capacity and Operations Enhancement Programme (ENRCORE) which include the conduct of carrying capacity studies and the integration of climate change considerations into the methodology with a pilot testing (Phase 1 of 2) in Region 6. ENRCORE is led by the Department of Environment and Natural Resources. Its components are policy development and capacity building that looks into sustainable development, effective water governance, access to sustainable energy services, and conservation and sustainable use of biodiversity.



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